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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,635	02/20/2004	Mitsuyuki Taniguchi	1785.1005	4147

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EXAMINER	
AURORA, REENA	

ART UNIT	PAPER NUMBER
2862	

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/781,635	TANIGUCHI ET AL.	
	Examiner	Art Unit	
	Reena Aurora	2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20feb 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/23/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This communication is in response to amendment received on 02/27/06.

Applicant has added new claims 9 – 19.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 –19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Griffen et al. (5,900,727) in view of Kano et al. (JP 2001-317966).

As to claims 1 - 7, Griffen et al. (hereinafter Griffen) discloses a kit for a rotary encoder including a plurality of signal generating members (24, 24', 24", fig. 1) for generating mutually different pulses, any selected one of the signal generating members (24, 24', 24", fig. 1) being able to be attached in an exchangeable manner to a rotary body (20, col. 8, lines 27 - 32); and a signal sensing unit (30, fig. 1) arranged in close proximity to one selected signal generating member (24) attached to the rotary body (20), for sensing a signal generated due to a rotation of the signal generating member (24); wherein the plurality of pulse generating members are respectively formed in such a manner that numbers of cycles and -intervals in pulses generated during a unit rotation of respective pulse generating members are different from each

other, while products of the numbers of pulse-cycles multiplied by the pulse-intervals in the pulses are generally identical to each other (col. 11, lines 15 – 29 and col. 12, lines 4 - 20). Griffen fails to disclose the signal generating members. Kano et al. (hereinafter Kano) discloses a kit type encoder which comprises a code plate unit (3) which is equivalent to a signal generating member. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a signal generating member or pulse generating member in a kit of rotary encoder would provide similar results.

As to claim 8, Griffen discloses a rotary encoder including a first pulse generating member (24, fig. 1) for generating a first pulse, the first pulse generating member (24) being able to be attached to a rotary body (20), in a manner as to be exchangeable with a second pulse generating member (24') for generating a second pulse different from the first pulse l; and a pulse sensing unit (30) arranged in close proximity to the first pulse generating member (24) attached to the rotary body (20), for sensing the first pulse generated due to a rotation of the first pulse generating member (24); wherein the first pulse generating member (24) is formed in such a manner that a number of pulse-cycles and a signal interval in the first pulse generated during a unit rotation of the first pulse generating member is different from a number of pulse -cycles and a pulse -interval in the second pulse generated during a unit rotation of the second pulse generating member, while a product of the number of pulse -cycles multiplied by the pulse -interval in the first pulse is generally identical to a product of the number of pulse -cycles multiplied by the pulse interval in the second v (col. 8, lines 27 - 32) and (col. 11,

lines 15 – 29 and col. 12, lines 4 - 20). Griffen fails to disclose the signal generating members. Kano et al. (hereinafter Kano) discloses a kit type encoder which comprises a code plate unit (3) which is equivalent to a signal generating member. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a signal generating member or pulse generating member in a kit of rotary encoder would provide similar results.

As to claims 9 – 19, Griffen discloses a rotary encoder comprising a rotary body (20); and at least two pulse generating members (24, 24'), each pulse generating member exchangably attachable to the rotary body (20), each pulse generating member having approximately the same outer diameter as the other pulse generating members and each including a pulse generating element having a pulse-generation pitch different from the other pulse generating members (col. 11, lines 15 – 29 and col. 12, lines 4 - 20). Griffen fails to disclose the signal generating members. Kano et al. (hereinafter Kano) discloses a kit type encoder which comprises a code plate unit (3), which is equivalent to a signal generating member. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a signal generating member or pulse generating member in a kit of rotary encoder would provide similar results.

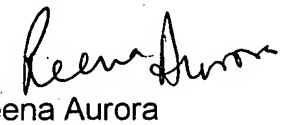
Response to Arguments

Applicant's arguments with respect to claims 1 - 19 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, E. Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Reena Aurora